

ABSTRACT

A single step method and apparatus for the production of expanded metal mesh from deformable metal strip such as lead or lead-alloy strip for use in lead-acid battery manufacture. The apparatus comprises a pair of opposed rolls each having a plurality of spaced discs having opposite side walls and circumferential, equally spaced, convexly shaped tool surfaces alternating with substantially flat surfaces, said discs having radial notches formed in the opposite sidewalls of alternate circumferential flat surfaces, whereby peripheral surfaces of opposing rolls are adapted to interact on deformable strip passing therebetween to concurrently slit and form convex wire segments and alternate nodes in said strip by intermeshing of said shaped tool surfaces. The method includes concurrently slitting and forming transverse rows of elongated, convexly-shaped wire segments deformed out of the plane of the strip with laterally adjacent wire segments extending from opposite sides of the plane of the strip, the lateral rows separated by alternately slit segments retained in the plane of the strip together defining nodes extending laterally across the strip.